

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An autoclave package, comprising a fibre-based packaging material treated with a hydrophobic size and comprising on the inside and/or outside of the fibre substrate one or more layers for reduced water penetration, the package having been treated under pressure at a temperature of 100 to 250 °C for a time of 5 min to 30 h, ~~characterised in that~~ wherein the fibre substrate has been treated with a hydrophobic size, an aluminium compound and a wet-strength size for increased heat resistance of the packaging material, and ~~in that~~ the weight ratio of hydrophobic size to the aluminium compound is 1:0.1–1:10.

2. (Currently Amended) A package as defined in claim 1, ~~characterised in that~~ wherein the weight ratio of hydrophobic size to aluminium compound is 1:0.1–1:7, ~~preferably 1:0.5–1:5, more advantageously 1:1–1:5, and most advantageously 1:1–1:3.~~

3. (Currently Amended) A package as defined in claim 1 or 2, ~~characterised in that~~ wherein hydrophobic size is used in an amount of 0.3–4 kg/t of dry fibre substrate, ~~preferably 0.5–3.0 kg/t of dry fibre substrate, such as 0.5–1.7 kg/t of dry fibre substrate.~~

4. (Currently amended) A package as defined in claim 1, ~~characterised in that~~ wherein the hydrophobic size ~~[[is a]]~~ comprises at least one size selected from the group consisting of alkenyl succinic acid anhydride (ASA) ~~[[and/or]]~~ and alkyl ketene dimer (AKD).

5. (Currently amended) A package as defined in claim 1, ~~characterised in that~~ wherein the hydrophobic size ~~[[is]]~~ comprises an ASA size.

6. (Currently amended) A package as defined in claim 1, ~~characterised in that~~ wherein the aluminium compound has been used in an amount of 1.0–20 kg/t of dry fibre substrate, ~~preferably 1.0–10 kg/t of dry fibre substrate 2.0–8 kg/t of dry fibre substrate.~~

7. (Currently amended) A package as defined in claim 1, ~~characterised in that~~ wherein the aluminium compound ~~[[is]]~~ comprises aluminium salt, ~~preferably alum.~~

8. (Currently amended) A package as defined in claim 1, ~~characterised in that~~ wherein the wet-strength size has been used in an amount of 0.2–12 kg/t of dry fibre substrate, ~~preferably 0.5–6 kg/t of dry fibre substrate, more advantageously 1–3 kg/t of dry fibre substrate.~~

9. (Currently amended) A package as defined in claim 1, ~~characterised in that~~ wherein the wet-strength size contains polyamido amine epichlorine hydrine resin (PAAE size).

10. (Currently amended) A package as defined in claim 1, ~~characterised in that~~ wherein the layer for reduced water penetration of the packaging material ~~[[is]]~~ comprises a polymer coating.

11. (Currently amended) A package as defined in claim 1, ~~characterised in that~~ wherein the packaging material comprises in the following order: a polymer heat-sealing layer, a white-pigmented polymer layer, a polymer layer containing black pigment, a treated fibre substrate, one or more polymer oxygen-barrier layers, a binder layer, a grey-pigmented polymer light-shield layer and a polymer heat-seal layer.

12. (Currently amended) A package as defined in claim 1, ~~characterised in that~~ wherein a filler has been added to the fibre substrate for increased heat resistance of the package.

13. (Currently amended) A package as defined in claim 1, ~~characterised in that~~ wherein the fibre substrate comprises at least one selected from the group consisting of ~~is made of~~ wrapping paper ~~[[or]]~~ and board.

14. (Currently Amended) A packaging material ~~[[intended]]~~ for autoclave packages, comprising a fibre substrate treated with a hydrophobic size and coated at least on one side with a layer for reduced water penetration, ~~characterised in that~~ wherein the fibre substrate of the packaging material has been treated with a hydrophobic size, an aluminium compound and a wet-strength size for increased heat resistance of the packaging material, and ~~in that~~ the weight ratio of hydrophobic size to the aluminium compound is 1:0.1-1:10.

15. (Currently Amended) A method for manufacturing a fibre-based packaging material ~~[[intended]]~~ for an autoclave package, the method comprising ~~[[treatment of]]~~ treating the fibre substrate with a hydrophobic size and coating ~~[[of]]~~ at least one side of the fibre substrate with a polymer layer for reduced water penetration, ~~such as a polymer layer, characterised in- wherein~~ the fibre substrate is treated with a hydrophobic size, an aluminium compound and a wet-strength size for increased heat resistance of the packaging material, and ~~in that~~ the weight ratio of hydrophobic size to the aluminium compound is 1:0.1-1:10.

16. (Currently Amended) A method as defined in claim 15, ~~characterised in that wherein~~ the heat resistance of the package is further enhanced by controlling the structure of the fibre substrate by at least one process selected from the group consisting of means of refining, wet- pressing, calendering ~~[[and/or]]~~ and Condebelt drying of the pulp.

17. (Currently Amended) A method as defined in claim 15 or 16, ~~characterised in that~~ wherein a filler is added to the fibre substrate for increased heat resistance of the package.

18. (Currently Amended) A method for autoclave treatment, comprising using ~~[[Use of]]~~ a combination of an aluminium compound, a hydrophobic size and a wet-strength size for increased autoclaving heat resistance of a fibre-based packaging material, such as reduced raw-edge penetration, in autoclaving under pressure at a temperature of 100 to 250 °C for a time of 5 min to 30 h.

19. (Currently Amended) A ~~[[Method]]~~ method for autoclave treatment of a package comprising a fibre-based packaging material treated with a hydrophobic size and comprising on the inside and/or outside of the fibre substrate one or more layers for reduced water penetration, ~~characterised in that there is used,~~ comprising:

treating a fibre substrate ~~treated~~ with a hydrophobic size, an aluminium compound and a wet-strength size for reduced raw-edge water penetration of the packaging material, the weight ratio of hydrophobic size to the aluminium compound being 1:0.1 – 1:10~~[[,]]~~; and

~~in that the autoclave treatment of~~ autoclaving the package ~~is carried out~~ under pressure with the aid of vapour at a temperature of 100 to 250 °C for a time of 5 min to 30 h.